

The opinion in support of the decision being entered today is *not* binding
precedent of the Board.

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte JAN LINDSKOG, GUNNAR RYDNELL, and PER GRAPATIN

Appeal 2007-1758
Application 10/004,786
Technology Center 2600

Decided: August 30, 2007

Before JOSEPH F. RUGGIERO, MAHSHID D. SAADAT, and JOHN A.
JEFFERY, *Administrative Patent Judges*.

RUGGIERO, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Appellants appeal under 35 U.S.C. § 134 from the Final Rejection of
claims 1, 3, 5, 7, 8, 10-16, and 18-25. Claims 2, 4, 6, 9, and 17 have been
canceled. We have jurisdiction under 35 U.S.C. § 6(b).

We reverse.

Appellants' claimed invention relates to a power saving method in a mobile terminal which includes a wireless Network Interface Card (NIC) for accessing a wireless LAN (WLAN) having an access point (AP). Upon a request by the mobile terminal for a transition from an active to a less active state, the NIC issues a request to the AP to be entered into a WLAN sleep state. After receiving acknowledgement of the request from the AP, the mobile terminal enters the WLAN sleep state.

Claim 1 is illustrative of the invention and reads as follows:

1. Method for power saving in a mobile terminal comprising a wireless Network Interface Card (NIC) for accessing a wireless LAN (WLAN) having an access point (AP), wherein the WLAN uses HIPERLAN Type 2 or IEEE 802.11 power save procedures and wherein the mobile terminal uses an operating system supporting a plurality of device power states said method comprising the steps of:

the mobile terminal requesting a transition from an active state to a less active state;

upon which request the NIC requests the AP to be entered into WLAN sleep state; and,

on acknowledgement from the AP the mobile terminal enters WLAN sleep state.

The Examiner relies on the following prior art references to show unpatentability:

| | | |
|--------------|-----------------|--|
| Chen | US 5,502,724 | Mar. 26, 1996 |
| Beach | US 6,067,297 | May 23, 2000 |
| van Bokhorst | US 6,192,230 B1 | Feb. 20, 2001 (filed Sep. 27, 1993) |
| Larsson | US 6,463,307 B1 | Oct. 8, 2002 (filed Aug. 14, 1998) |

Claims 1, 3, 5, 7, 8, 10-16, and 18-25 stand rejected under 35 U.S.C. § 103(a). As evidence of obviousness, the Examiner offers the combination of Beach and Larsson with respect to claims 1, 7, 11, and 13-16, adds van Bokhorst to the basic combination with respect to claims 3, 10, 12, 18, and 23, and further adds Chen with respect to claims 5, 8, 19-22, 24, and 25.

Rather than reiterate the arguments of Appellants and the Examiner, reference is made to the Brief and Answer for the respective details. Only those arguments actually made by Appellants have been considered in this decision. Arguments which Appellants could have made but chose not to make in the Brief have not been considered and are deemed to be waived [see 37 C.F.R. § 41.37(c)(1)(vii)].

ISSUES

- (1) Under 35 U.S.C § 103(a), with respect to appealed claims 1, 7, 11, and 13-16, would one of ordinary skill in the art at the time of the invention have found it obvious to combine Beach and Larsson to render the claimed invention unpatentable?
- (2) Under 35 U.S.C § 103(a), with respect to appealed claims 3, 10, 12, 18, and 23, would the ordinarily skilled artisan have found it obvious to modify the combination of Beach and Larsson by adding van Bokhorst to render the claimed invention unpatentable?
- (3) Under 35 U.S.C § 103(a), with respect to appealed claims 5, 8, 19-22, 24, and 25 would the ordinarily skilled artisan have found it obvious to modify the combination of Beach, Larsson, and van Bokhorst by adding Chen to render the claimed invention unpatentable?

PRINCIPLES OF LAW

In rejecting claims under 35 U.S.C. § 103, it is incumbent upon the Examiner to establish a factual basis to support the legal conclusion of obviousness. *See In re Fine*, 837 F.2d 1071, 1073, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). In so doing, the Examiner must make the factual determinations set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 17, 148 USPQ 459, 467 (1966). “[T]he examiner bears the initial burden, on review of the prior art or on any other ground, of presenting a *prima facie* case of unpatentability.” *In re Oetiker*, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992). Furthermore, “‘there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness’ . . . [H]owever, the analysis need not seek out precise teachings directed to the specific subject matter of the challenged claim, for a court can take account of the inferences and creative steps that a person of ordinary skill in the art would employ.” *KSR Int’l Co. v. Teleflex Inc.*, 127 S. Ct. 1727, 1741, 82 USPQ2d 1385, 1396 (2007)(quoting *In re Kahn*, 441 F.3d 977, 988, 78 USPQ2d 1329, 1336 (Fed. Cir. 2006)).

ANALYSIS

With respect to the obviousness rejection of independent claims 1 and 13, Appellants’ arguments in response assert a failure by the Examiner to establish a *prima facie* case of obviousness since, even if combined, all of the claimed limitations would not be taught or suggested by the applied prior art references. In particular, Appellants contend (Br. 1-2) that, in contrast to the claimed invention, neither Beach nor Larsson discloses the specific

interaction of the mobile terminal, its wireless network interface card, and an access point as claimed.

After reviewing the disclosures of Beach and Larsson in light of the arguments of record, we are in general agreement with Appellants' position as stated in the Brief. With respect to Beach, to whatever extent the Examiner may be correct in the finding that Beach discloses a mobile terminal, a wireless network card, and an access point, the Examiner has correctly recognized that Beach has no disclosure of any requests by the mobile terminal for a change in power state (appealed claim 1), nor any interaction of the mobile terminal with a network interface card to force a less active power state due to inactivity (appealed claim 13).

We also find no disclosure in Larsson that would overcome the deficiencies of Beach in disclosing the specific claimed interaction among the mobile terminal, the wireless network card, and the access point. While Larsson arguably provides a teaching of a mobile terminal communicating with a base station, i.e., an access point, to request a transition to a less active power state, there is no disclosure of any kind of interaction with a wireless network interface card. Given this deficiency in the disclosure of Larsson, we fail to see how and in what manner Larsson might be combined with Beach to arrive at Appellants' invention as claimed.

In view of the above discussion, we are of the opinion that, since the Larsson reference does not overcome the deficiencies of Beach discussed above, the references, even if combined, do not support the obviousness rejection. We, therefore, do not sustain the Examiner's 35 U.S.C. § 103(a) rejection of independent claims 1 and 13, nor of claims 7, 11, and 14-16 dependent thereon.

Turning to the Examiner's 35 U.S.C. § 103(a) rejection of independent claims 3 and 18 as well as that of dependent claims 10, 12, and 23 based on the combination of Beach and van Bokhorst, we do not sustain this rejection as well. Independent claims 3 and 18 are directed to an "ad-hoc" network in which a first mobile terminal will interact with a wireless interface network card and a second mobile terminal to request transition from an active to a less active state.

As with the previously discussed rejection of independent claims 1 and 13, the Examiner looks to a secondary reference, van Bokhorst in this case, to address the deficiencies of Beach in disclosing any requests made by a mobile terminal for a change in power state. We do not find any disclosure in van Bokhorst, however, which would overcome the above-noted deficiencies of Beach. We find in van Bokhorst, at best, a disclosure of an "ad-hoc" network beginning at column 7, line 15, as well as a disclosure (col. 2, l. 42 through col. 3, l. 15) of "awake" and "doze" power states under control of a doze timer 46 and state switch 44. There is no disclosure, however, of any requests by the mobile terminal for a power state transition, let alone any interaction with a wireless network interface card to communicate with and act upon any such requests.

Lastly, we also do not sustain the Examiner's obviousness rejection of claims 5, 8, 19-22, 24, and 25 in which the Chen reference is added to the combination of Beach and van Bokhorst to address the claimed feature of a mobile terminal requesting to be disassociated or de-authenticated from an access point (independent claim 5) or from another mobile terminal (independent claim 8). While we agree with the Examiner (Answer 8-9) that Chen provides a disclosure of a mobile terminal requesting that it be

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disconnected from another mobile terminal, such a teaching does not overcome the deficiencies of Beach and van Bokhorst. As discussed previously, there is no disclosure in Beach or van Bokhorst of a mobile terminal making a request for a transition from a active state to a less active state, a teaching which is also missing from Chen.

CONCLUSION

In summary, we have not sustained the Examiner's 35 U.S.C. § 103(a) rejections of any of the claims on appeal. Therefore, the decision of the Examiner rejecting claims 1, 3, 5, 7, 8, 10-16, and 18-25 is reversed.

REVERSED

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